FIG. 2A

| ух | 1/16 | -3/16 | 10/16 | 10/16 | -3/16 | 1/16 |
|-------|--------|---------|---------|---------|---------|--------|
| 1/16 | 1/256 | -3/256 | 10/256 | 10/256 | -3/256 | 1/256 |
| -3/16 | -3/256 | 9/256 | -30/256 | -30/256 | 9/256 | -3/256 |
| 10/16 | 10/256 | -30/256 | 100/256 | 100/256 | -30/256 | 10/256 |
| 10/16 | 10/256 | -30/256 | 100/256 | 100/256 | -30/256 | 10/256 |
| -3/16 | -3/256 | 9/256 | -30/256 | -30/256 | 9/256 | -3/256 |
| 1/16 | 1/256 | -3/256 | 10/256 | 10/256 | -3/256 | 1/256 |

First YH extraction filter F1

FIG.2B

| yX | 1/8 | 3/8 | 3/8 | 1/8 |
|-----|------|------|------|------|
| 1/8 | 1/64 | 3/64 | 3/64 | 1/64 |
| 3/8 | 3/64 | 9/64 | 9/64 | 3/64 |
| 3/8 | 3/64 | 9/64 | 9/64 | 3/64 |
| 1/8 | 1/64 | 3/64 | 3/64 | 1/64 |

Second YH extraction filter F2

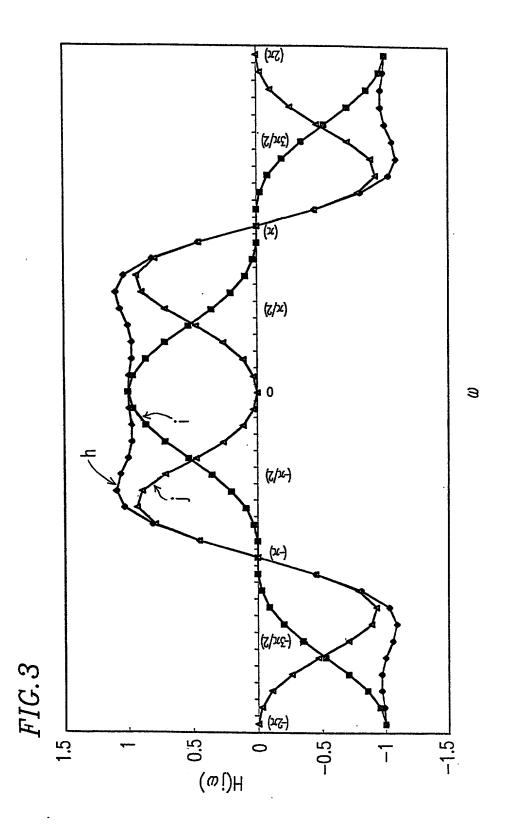


FIG.4

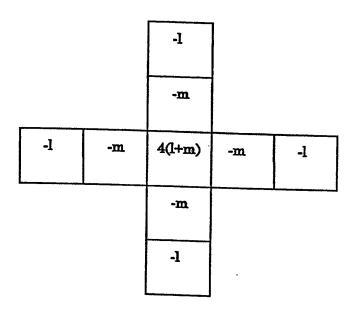


FIG.5A

| y X | 1/4 | 3/4 | 3/4 | 1/4 |
|-----|------|------|------|------|
| 1/4 | 1/16 | 3/16 | 3/16 | 1/16 |
| 3/4 | 3/16 | 9/16 | 9/16 | 3/16 |
| 3/4 | 3/16 | 9/16 | 9/16 | 3/16 |
| 1/4 | 1/16 | 3/16 | 3/16 | 1/16 |

RB-interpolation filter

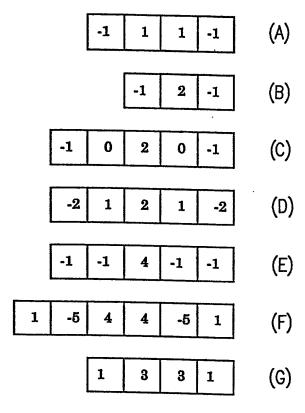
FIG.5B

| ух | 1/4 | 3/4 | 3/4 | 1/4 |
|-----|------|------|------|------|
| 1/8 | 1/32 | 3/32 | 3/32 | 1/32 |
| 3/8 | 3/32 | 9/32 | 9/32 | 3/32 |
| 3/8 | 3/32 | 9/32 | 9/32 | 3/32 |
| 1/8 | 1/32 | 3/32 | 3/32 | 1/32 |

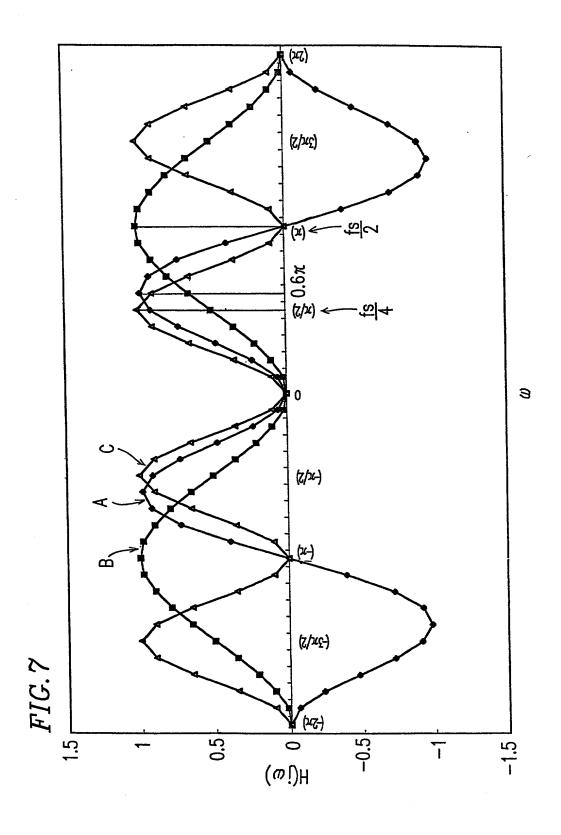
G—interpolation filter

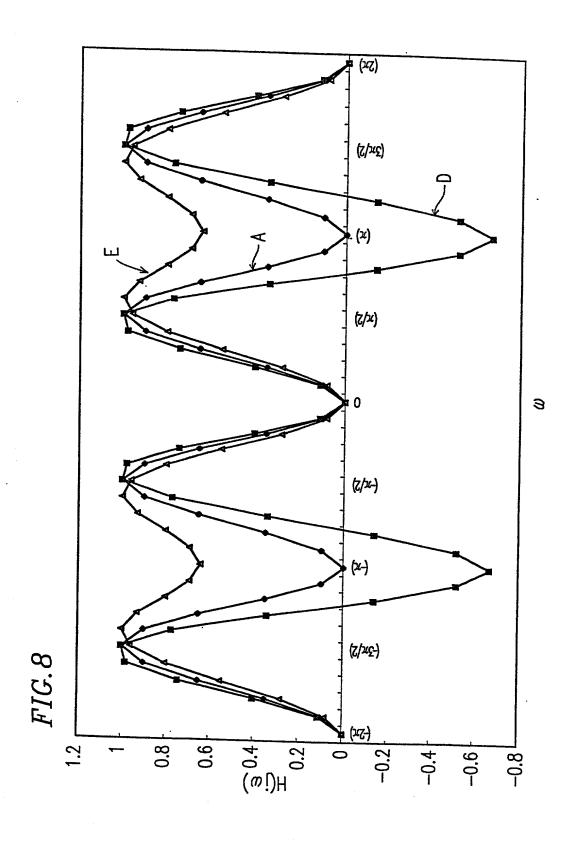
(Operation in x—direction has priority over operation in y—direction)

FIG.6



One-dimensional filter





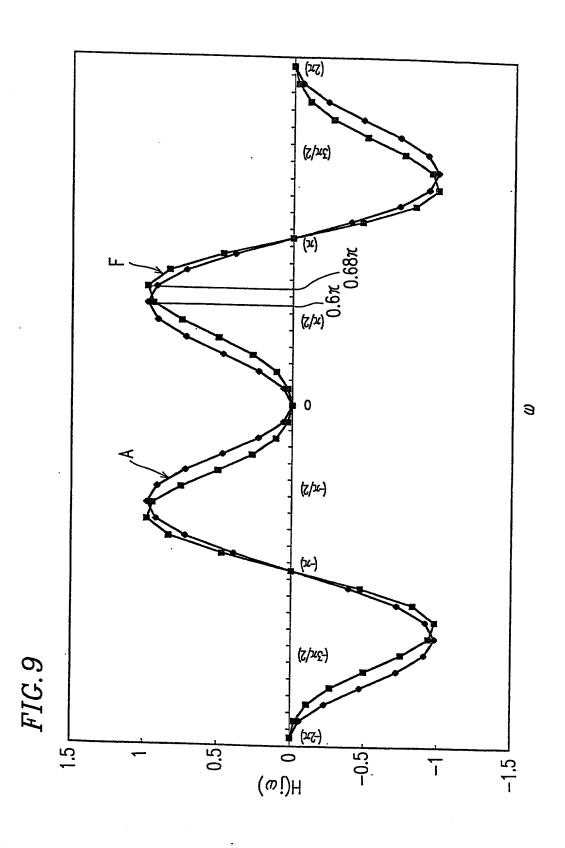
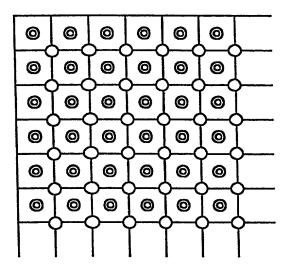
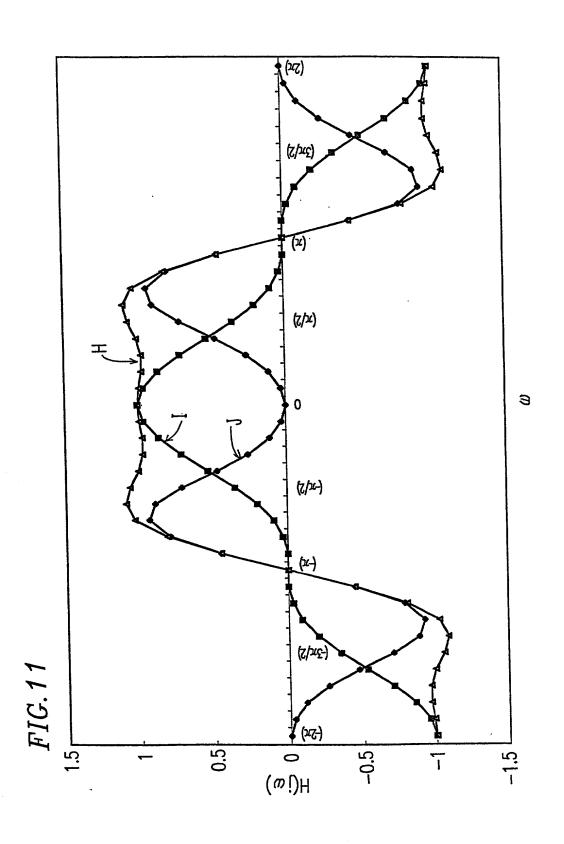
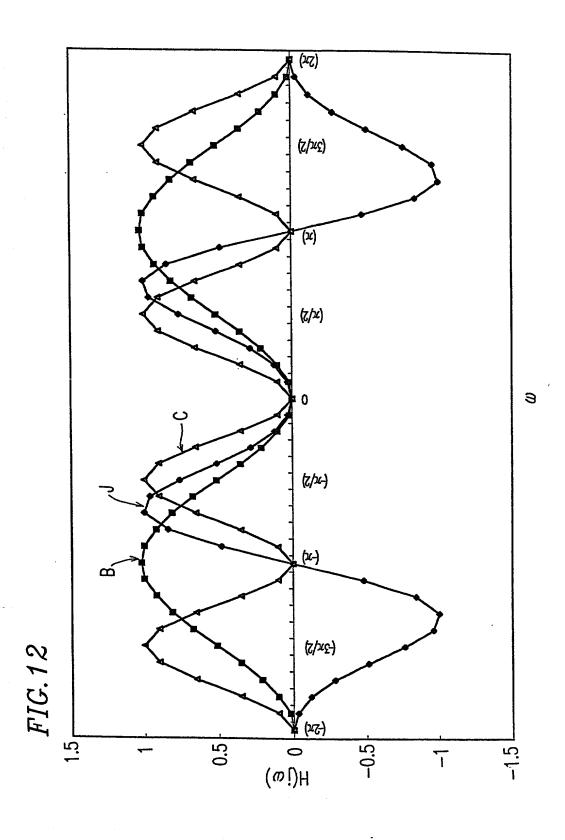


FIG. 10







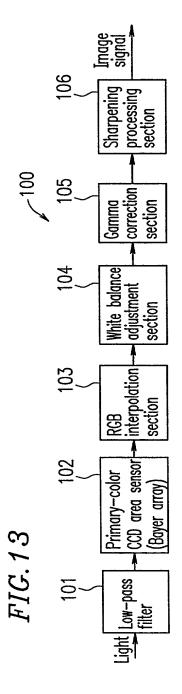


FIG. 14

| . ≯α κ ∈ | | | | | | | |
|----------------------------|---|---|---|---|---|---|--|
| * | R | G | R | G | R | G | |
| $\frac{\Delta y}{\Lambda}$ | G | В | G | В | G | В | |
| Ţ | R | G | R | G | R | G | |
| - | G | В | G | В | G | В | |
| | R | G | R | G | R | G | |
| | G | В | G | В | G | В | |
| | | | | | | | |

FIG.15

| B1 | G2 | B 3 |
|----|----|------------|
| G4 | R5 | G6 |
| B7 | G8 | В9 |

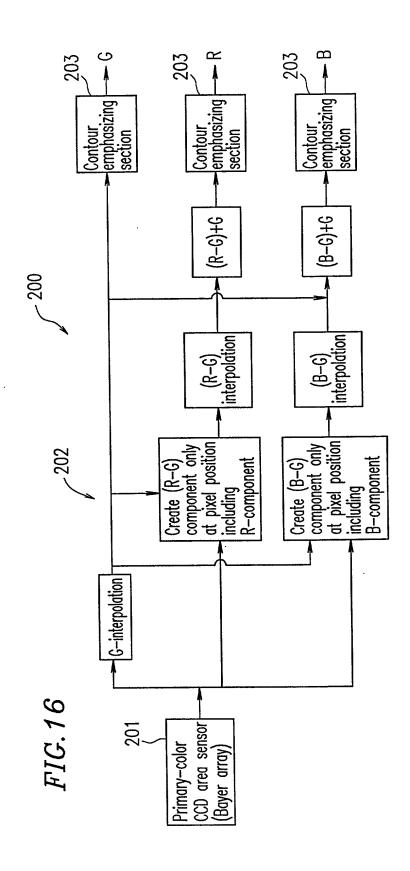
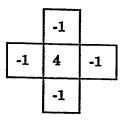


FIG. 17A

-1 0 -1 0 4 0 -1 0 -1

FIG. 17B



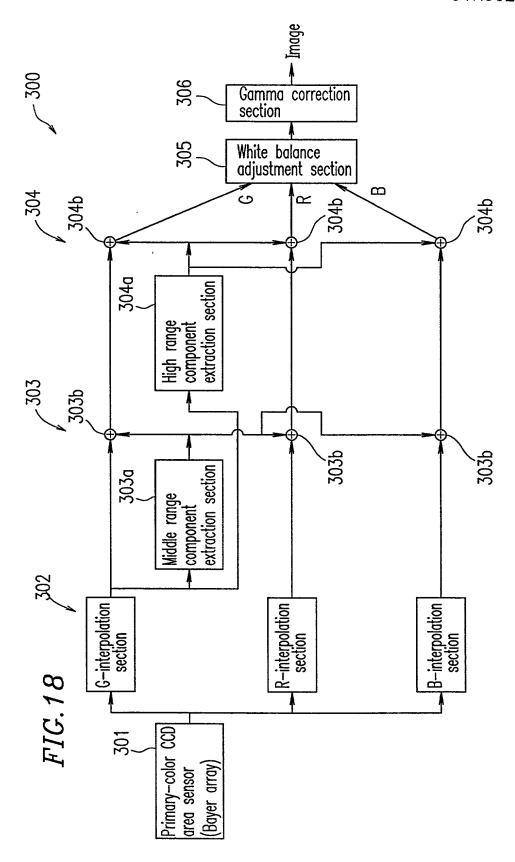


FIG.19

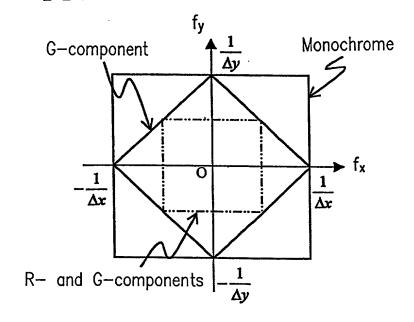


FIG.20

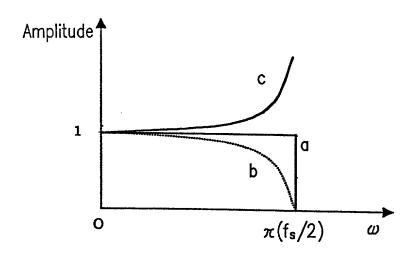


FIG.21

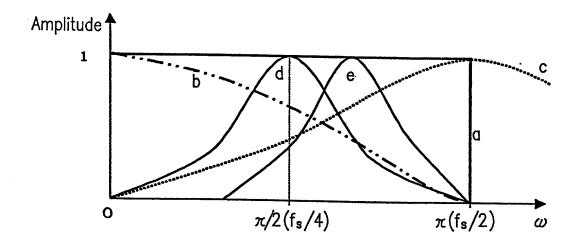


FIG.22

| 1/256 | -3/256 | 10/256 | 10/256 | -3/256 | 1/256 |
|--------|---------|---------|---------|---------|--------|
| -3/256 | 5/256 | -42/256 | -42/256 | 5/256 | -3/256 |
| 10/256 | -42/256 | 64/256 | 64/256 | -42/256 | 10/256 |
| 10/256 | -42/256 | 64/256 | 64/256 | -42/256 | 10/256 |
| -3/256 | 5/256 | -42/256 | -42/256 | 5/256 | -3/256 |
| 1/256 | -3/256 | 10/256 | 10/256 | -3/256 | 1/256 |